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ABSTRACT

French and Raven (1959) proposed five bases of social power: referent, expert, legitimate, reward, and coercive power. Other power bases, such as information control and ecological control, have also been proposed. Another factor which might be considered a power base is the credibility of a source. A 2 x 3 factorial design was used to manipulate the level of power and the credibility of an actor. Vignettes were created in which a manager had either high or low reward and coercive power. The actor was described as having either high or low power, and was also described as having established high or low credibility in the past or no credibility information was provided. Vignettes were read by 84 undergraduate students who then responded to power scales and answered questions measuring credibility. The results revealed that the relationship between credibility and social power is a complex one. Credibility had no effect on power ratings in the high power condition, but in the lower power conditions the manager with high credibility was perceived as more powerful than the low credibility manager. Thus when the employee had low objective power, high credibility served to significantly enhance the power ratings for reward, coercive, referent, and legitimate power bases. (NB)

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Credibility and Perceived Power Ratings

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Running Head: Credibility and Power

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Credibility and Perceived Power Ratings

Social power is a topic which has inspired research and discussion by social scientists for many years. One of the most influential analyses of social power was provided by French and Raven (1959). They proposed five bases of social power: referent, expert, legitimate, reward, and coercive power. Other power bases, such as information control and ecological control, have also been proposed (cf. Tedeschi, Schlenker & Bonoma, 1973).

Another factor which might be considered a power base is the credibility of a source. Tedeschi and Lindskold (1976) defined credibility as the objectively determined truthfulness, follow-through of deeds following words, and accuracy of a source in representing events. Evidence suggests a direct effect of the credibility of a source on the effectiveness of various forms of social influence (e.g., Birnbaum & Mellors, 1983; Crosbie, 1972; Heilman, 1974; Horai & Tedeschi, 1969; Mcgarry & Hendrick, 1974; Schlenker, Nacci, Helm, & Tedeschi, 1976).

The present study was guided by the hypothesis that a person with high credibility would be perceived as more powerful than a person with low credibility. If credibility is a power base there should be a direct relationship between credibility and perceived power. In a 2 x 3 factorial design, the level of power and the credibility of an actor were manipulated. Vignettes were created in which a manager had either high reward and coercive power or had low reward and coercive power. The actor was

described as having established high or low credibility in the past or no credibility information was provided. A modified version of a scale developed by Hinkin and Schriesheim (1989) was used to measure the French and Raven (1959) power bases. It was hypothesized that a direct relationship would be found between credibility and perceived power ratings. A direct relationship between manipulated power and perceived power was also expected.

Method

Subjects

Undergraduates (N = 84) in upper level psychology courses volunteered to participate in this study during class periods.

Procedure

Subjects were presented with a paragraph describing an employee at a company. He was described as having either high or low power, and was also described as 90% credible (high credibility) or 50% credible (low credibility). In the no information about credibility condition, nothing was said about credibility.

Subjects were asked to respond to a modified version of Hinkin and Schriesheim's (1989) power scales in addition to seven items measuring credibility. All ratings were made on 9 point Likert-type scales.

Results

Pilot Studies

Two pilot studies confirmed the effectiveness of the power and credibility manipulations within the vignettes using the

appropriate scales as dependent variables (all ps < .05).

Main Study

A 2 x 3 multivariate analysis of variance was performed to examine the effects of information about power (high or low) and credibility (high, low or no information) using the 5 power scales as the dependent variables. A significant multivariate main effect was found for the manipulation of power, (Wilk's Lambda = .29, F (1, 78) = 34.82, η^2 = .70, p < .001), providing evidence for a direct relationship between manipulated power and perceived power. Univariate follow up tests were significant for the reward, coercive, legitimate, and referent power scales (all ps <.01). Only expert power was non-significant.

A significant multivariate main effect was found for the manipulation of credibility, (Wilk's Lambda = .72, F (2, 78) = 2.65, η^2 = .15, p < .01). Univariate follow up tests indicated significant effects of credibility on measures of referent, expert, legitimate and reward power (all ps < .05). The effect sizes (η^2) ranged from .09 to .16. There was a trend towards significance for coercive power (F (2, 78) = 2.94, η^2 = .07, p = .059).

Insert Figure 1 about here

As can be seen from Figure 1, the means for reward, coercive, legitimate, and referent power all fell into the

predicted pattern: the low credibility manager was perceived as less powerful than the manager in the no credibility information condition. The high credibility manager received the highest perceived power ratings. This pattern was not observed for the ratings of expert power, but the means are in the expected direction for the low and high credibility conditions.

A significant multivariate interaction between power and credibility was also found (Wilk's Lambda = .77, F (2, 78) = 2.07, η^2 = .12, p < .05). Further examination indicated that the multivariate effect of credibility at the level of high power was not significant (Wilk's Lambda = .89, F (2, 78) < 1.0, p > .20). However, the effect of credibility at the level of low power was significant (Wilk's Lambda = .63, F (2, 78) = 3.83, η^2 = .21, p < .001). Univariate follow-up tests indicated significant effects on all 5 power bases (all ps < .05). The effects size estimates (η^2) for the credibility manipulation on the power ratings ranged from .16 to .09. The means for the five power bases at the level of low power are presented in Figure 2. As can be seen from Figure 2, the high credibility manager received the highest perceived power ratings on all of the power bases except expert power.

Insert Figure 2 about here

The scale reliabilities and intercorrelations are presented in Table 1. The coefficient alpha reliabilities for the scales

measuring power and credibility (ranging from .85 to .97) suggested that the modified Hinkin and Schriesheim (1989) scales were as reliable as the originals. The credibility scale is also highly reliable. Scale intercorrelations revealed that the credibility scale correlated significantly with all 5 of the French and Raven power bases.

Insert Table 1 about here

Discussion

The relationship between credibility and social power is a complex one. While both social power and credibility had direct effects on perceived social power, interpretation must be made in the context of the significant interaction of the two factors. Credibility had no effect on power ratings in the high power condition, but in the lower power conditions the manager with high credibility was perceived as more powerful than the low credibility manager. Thus, when the employee had low objective power, high credibility served to significantly enhance the power ratings for the reward, coercive, referent and legitimate power bases.

These findings suggest that when persons have high objective power, credibility is relatively unimportant to their perceived power. It is possible that high credibility could not increase perceived power due to a ceiling effect, but low credibility did not lower the perceived power of managers who possessed high

objective power. When a person had low objective power, high credibility significantly enhanced perceptions of power as measured by the reward, coercive, referent and legitimate power bases.

An omnibus variable created by summing the five power base scales yielded a similar pattern of results as obtained in the analyzes of the separate scales. The effects sizes were impressive given that the scales used were not designed to assess credibility. Low credibility did not further lower the perceived power of managers who possessed low objective power. It is not likely that the lack of effect of low credibility is due to a floor effect since most ratings of power (in the low objective power conditions) were near the mid)point of the scales.

A graphic representation of a model delineating the effects of credibility on perceived power is presented in Figure 3. Both objective power and credibility had direct effects on perceived power, as indicated by the main effects observed. Objective power also had a moderating effect on the relationship between credibility and perceived power, as indicated by the significant interaction of credibility and power (Baron & Kenny, 1986).

Insert Figure 3 about here.

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Author Notes

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Table 1

Scale Reliabilities and Intercorrelations

	REWARD	REFERENT	LEGITIMATE	COERCIVE	EXPERT	CRED
REWARD	(.97)					
REFERENT	.58**	(.91)				
LEGITIMATE	.45**	.80**	(.91)			
COERCIVE	.67**	.74**	.64**	(.91)		
EXPERT	-.01	.39**	.41**	.21	(.85)	
CRED	.25*	.42**	.45**	.33**	.27*	(.97)

Note. Numbers in parentheses reflect Cronbach's alpha for that scale. CRED refers to the 7 item credibility scale.

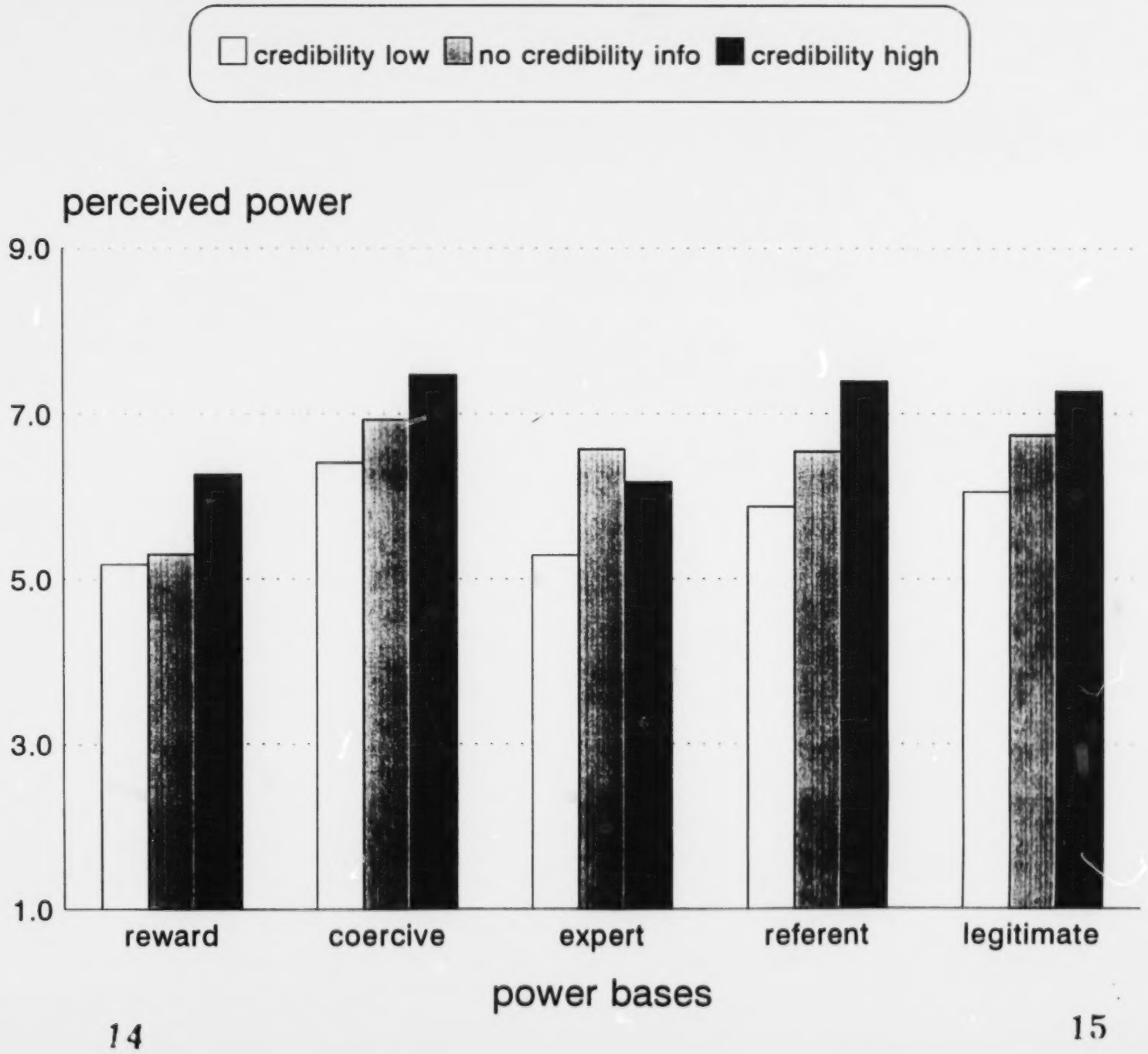
*p < .05,two-tailed. **p < .01, two-tailed.

Figure Captions

Figure 1. Means for the Multivariate Main Effect of Credibility.

Figure 2. Means for the Simple Main Effect of Credibility at the Level of Low Power.

Figure 3. Model Illustrating the Direct Effects of Credibility and Objective Power on Perceived Power, and the Moderating Effect of Objective Power on the Relationship Between Credibility and Perceived Power.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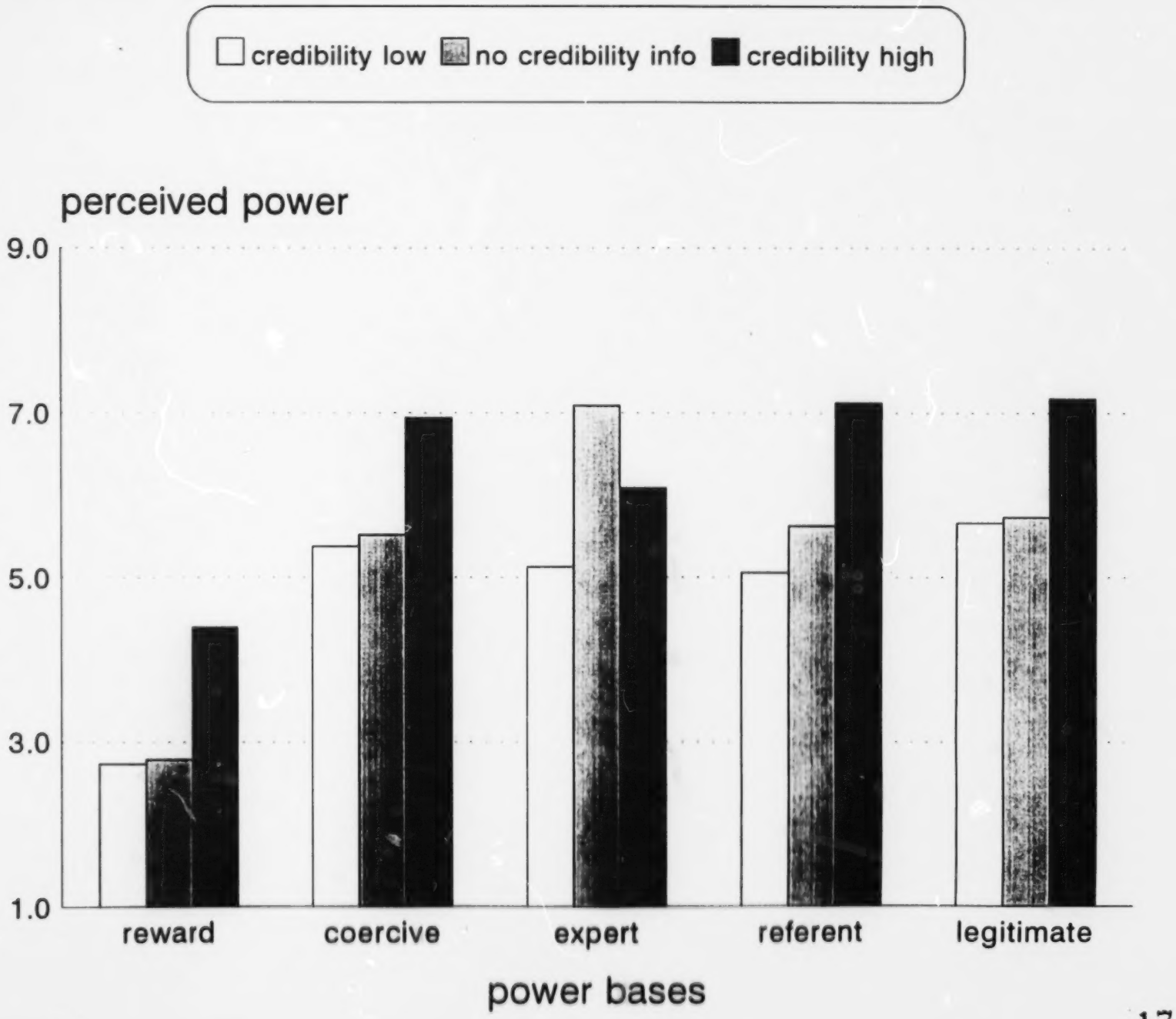
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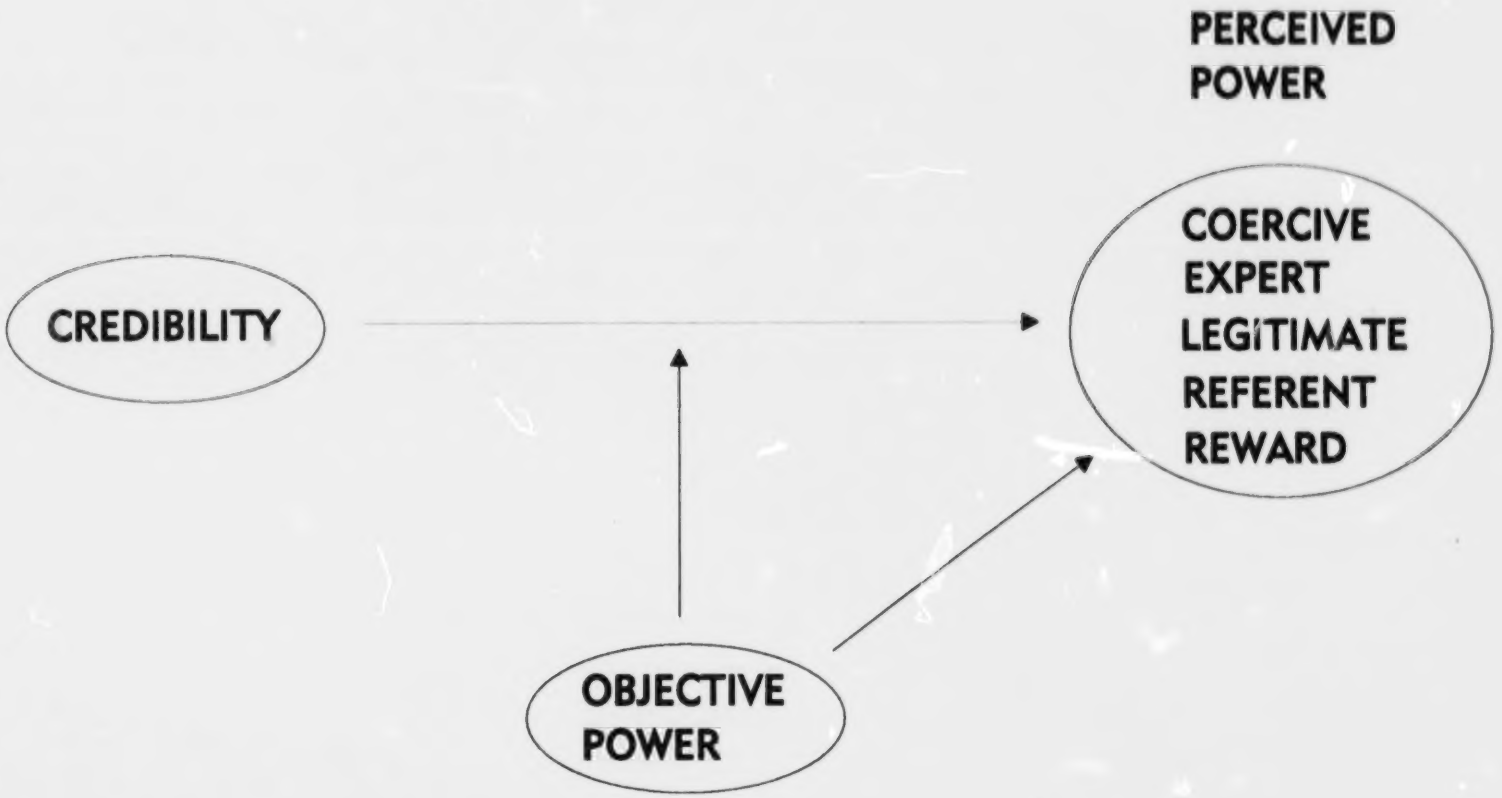
PERCEIVED
POWER
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REWARD
OBJECTIVE
POWER